federal register

TUESDAY, MARCH 20, 1979
PART V

ENVIRONMENTAL PROTECTION AGENCY

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PERFORMANCE STANDARDS FOR NEW STATIONARY SOURCES

Amendment to Petroleum Refinery Claus Sulfur Recovery Plants

[6560-01-M]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 60]

[FRL 1042-1]

STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Amendment to Petroleum Refinery Claus Sulfur Recovery Plants

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This action proposes to amend the definition of small "petroleum refinery" contained in the standard of performance promulgated for petroleum refinery Claus sulfur recovery plants (43 FR 10866, March 15, 1978). The promulgated standard exempts small Claus sulfur recovery plants associated with a small petroleum refinery. Included in the definition of a small refinery is the qualification that the petroleum refinery must owned or controlled by a refiner (or company) whose total crude oil processing capacity is 137,500 barrels per stream day (BSD) or less. Two large oil companies (i.e., with more than 137,500 BSD processing capacity) filed a Petition for Review of the promulgated standard challenging the standard and the applicability of the exemption to only small companies. After considering the arguments presented in this petition and reconsidering the background information for the promulgated standard, EPA believes it is appropriate to apply the exemption to all small petroleum refineries. Consequently, the proposed amendment extends the exemption for small Claus sulfur recovery plants located in small petroleum refineries to all companies regardless of their total crude oil processing capacity.

This amendment will not will result in any significant change in the environmental, energy, or economic impacts resulting from the promulgated standard.

DATE: Comments must be received on or before May 21, 1979.

ADDRESS: Comments should be submitted to the Emission Standards and Engineering Division (MD-13), Environmental Protection Agency, Research Triangle Park, North Carolina 27771, Attention: Mr. Jack R. Farmer.

Interested persons who desire an opportunity for the oral presentation of data, views, or arguments should also contact Mr. Farmer.

Docket: Docket No. OAQPS-79-10 containing all supporting information used by EPA in developing the proposed rule, as well as comments received on this proposal will be available for public inspection and copying at the EPA Central Docket Section (A-130), Room 2903B, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT:

Don R. Goodwin, Emission Standards and Engineering Division, Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number 919-541-5271.

SUPPLEMENTARY INFORMATION:

PROPOSED AMENDMENT AND BACKGROUND

It is proposed to amend Subpart J—Standards of Performance for Petroleum Refineries to change the applicability of the standard for new, modified, or reconstructed petroleum refinery Claus sulfur recovery plants. The amendment will exempt from the standard all Claus sulfur recovery plants with a capacity of 20 long tons per day (LTD) or less associated with a petroleum refinery having a processing capacity of 50,000 BSD or less.

On October 4, 1976 (41 FR 43866), EPA proposed standards of performance limiting SO_2 emissions from new, modified, or reconstructed petroleum refinery Claus sulfur recovery plants. These standards applied to all petroleum refinery Claus sulfur recovery plants, regardless of the size of the dulfur recovery plant or the size of the refinery involved. During the comment period following proposal, several commenters presented information showing that the economic impact of the standards would be much more severe on a small petroleum refinery than on a large petroleum refinery. As a result, EPA reexamined this point and concluded that an exemption from the standard was appropriate for small sulfur recovery plants located in small petroleum refineries. In defining the "small petroleum refinery", EPA adopted the definition included in section 211(g) of the Clean Air Act as amended August 1977 which defines a small petroleum refinery as one of 50,000 BSD or less which is owned or controlled by a company with no more than 137,500 BSD of total crude oil processing capacity.

On May 12, 1978, a Petition for Review of the standard was filed in the U.S. Court of Appeals for the District of Columbia Circuit on behalf of Phillips Petroleum Company and Ashland Oil, Inc. Among other things, the Petitioners argued that the exemption from the standard for small sulfur recovery plants associated with small petroleum refineries should apply in all cases, regardless of the size (i.e., total refining capacity) of the company owning or controlling the refinery. After a consideration of the points covered in the Petition for Review and the background information for the promulgated standard, EPA agrees with the Petitioners and is proposing this amendment to the standard. The Petitioners have agreed to dismiss their entire Petition for Review if the final regulation does not differ substantively from the proposal discussed herein.

RATIONALE

As concluded in the preamble to the promulgated regulation (43 FR 10866, March 15, 1978) EPA's analysis of the impact of the proposed standard on the profitability of a small petroleum refinery indicated this impact would have been more severe than the corresponding impact on a large petroleum refinery. The attempt of the Agency in allowing the exemption from the standard was to:

(1) Lessen the adverse economic impact of the standard on the small refinery compared to the large refinery; and

(2) Have minimum impact on efforts by States to encourage installation of sulfur plants at small refineries where none previously existed.

In considering the appropriateness of an exemption from standard for certain refineries, EPA first looked at the cost per unit of sulfur recovered (i.e., cost effectiveness) relative to the size of the refinery Claus sulfur recovery plant having to comply with the standard. This analysis revealed a significant deterioration in cost effectiveness for Claus sulfur recovery plant capacities of 20 LTD or less. As a result, EPA concluded that refinery Claus sulfur recovery plants with a capacity of 20 LTD or less should be exempted from the standard. Since the economic impact of the standard was also known to be dependent upon the size of the refinery in which the Claus sulfur recovery plant was located, EPA reviewed its analysis of the impact of the standard on different size refineries. On the basis of this analysis, EPA concluded that for refineries of 50,000 BSD or less the reduction in profitability required by the standard was unreasonable. Thus, initial drafts of the standards provided an exemption for Claus sulfur recovery plants with a capacity of 20 LTD or less associated with a petroleum refinery having a processing capacity of 50,000 BSD or less.

During internal EPA review of the standard prior to promulgation, a recommendation was made that "small petroleum refinery" be defined to be consistent with section 211(g) of the Clean Air Act. This provision defines a small refinery as one with a total crude oil processing capacity of 50,000

BSD or less owned or controlled by a company with a total crude oil processing capacity of 137,500 BSD. This suggestion was incorporated into the standard. Thus, the promulgated standard exempted and Claus sulfur recovery plant with a capacity of 20 LTD or less associated with a petroleum refinery having processing capacity of 50,000 BSD or less owned or controlled by a company with a total processing capacity of 137,500 BSD or less.

In light of the evolution of this standard, it is apparent that EPA did not in this case conduct the analysis required to support the requirement in the standard that a small refinery be owned or controlled by a company wih a total crude oil processing capacity of 137,500 BSD. Thus, the proposed amendment will exempt from standards of performance all new, modified, or reconstructed Claus sulfur recovery plants with a capacity of 20 LTD or less associated with a petroleum refinery having a crude oil processing capacity of 50,000 BSD or less.

Environmental, Economic and Energy Impacts

This amendment will result in a negligible increase in SO_2 emissions compared to the promulgated regulation. Based on past trends in petroleum refinery and sulfur recovery plant construction, very few large companies are likely to build small petroleum refineries with small sulfur recovery plants. In addition, the few petroleum refinery Claus sulfur recovery plants involved would be regulated by State regulations at a control level only somewhat less than that of the promulgated standard.

For the same reasons, this amendment will result in a negligible decrease in costs and energy consumption compared to the promulgated standard.

Miscellaneous

The docket is an organized and complete file of all the information submitted to or otherwise considered by EPA in the development of this rulemaking. The principal purposes of the docket are: (1) To allow members of the public and industries involved to identify and participate in the rulemaking process, and (2) to serve as the record for judicial review. The docket is required under section 307(d) of the Clean Air Act, as amended, and is available for public inspection and copying at the address above.

It should be noted that standards of performance for new sources under section 111 of the Clean Air Act reflect:

> • • • application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. [Section 111(a)(1).]

Although there may be emission control technology available that can reduce emissions below those levels required to comply with standards of performance, this technology might not be selected as the basis of standards of performance due to costs associated with its use. Accordingly, standards of performance should not be viewed as the ultimate in achievable emission control. In fact, the Act requires (or has the potential for requiring) the imposition of a more stringent emission standard in several situations.

For example, applicable costs do not necessarily play as prominent a role in determining the "lowest achievable emission rate" for new or modified sources locating in nonattainment areas, i.e., those areas where statutorily-mandated health and welfare standards are being violated. In this respect, section 173 of the Act requires that a new or modified source constructed in an area which exceeds the NAAQS must reduce emissions to the level which reflects the "lowest achievable emission rate" (LAER), as defined in section 171(3), for such category of source. The statute defines LAER as that rate of emissions which reflects:

> (A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or
>
> (B) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.

In no event can the emission rate exceed any applicable new source performance standard [section 171(3)].

A similar situation may arise under the prevention of significant deterioration of air quality provisions of the Act (Part C). These provisions require that certain sources [referred to in section 169(1)] employ "best available control technology" [as defined in section 163(3)] for all pollutants regulated under the Act. Best available control technology (BACT) must be determined on a case-by-case basis, taking energy, environmental and economic impacts and other costs into account. In no event may the application of BACT result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 111 (or 112) of the Act.

In all events, State Implementation Plans (SIP's) approved or promulgated under section 110 of the Act must provide for the attainment and maintenance of national ambient air quality standards (NAAQS) designed to protect public health and welfare. For this purpose, SIP's must in some cases require greater emission reductions than those required by standards of performance for new sources.

Finally, States are free under section 116 of the Act to establish even more stringent emission limits than those established under section 111 or those necessary to attain or maintain the NAAQS under section 110. Accordingly, new sources may in some cases be subject to limitations more stringent than EPA's standards of performance under section 111, and prospective owners and operators of new sources should be aware of this possibility in planning for such facilities.

Section 317 of the Clean Air Act requires the Administrator to prepare an economic impact assessment for revisions determined by the Administrator to be substantial. The Administrator has determined that the economic impact of the proposed amendment is not substantial and an economic impact assessment is not required.

Dated: March 9, 1979.

Barbara Blum,
Acting Administrator.

It is proposed to amend Part 60 of Chapter I, Title 40 of the Code of Federal Regulations as follows:

Subpart J—Standards of Performance for Petroleum Refineries

Section 60.101 is amended as follows:

§ 60.101 Definitions.

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(m) "Small petroleum refinery" means a petroleum refinery which has a crude oil processing capacity of 50,000 barrels per stream day (BSD) or less.

[FR Doc. 79-8258 Filed 3-19-79; 8:45 am]